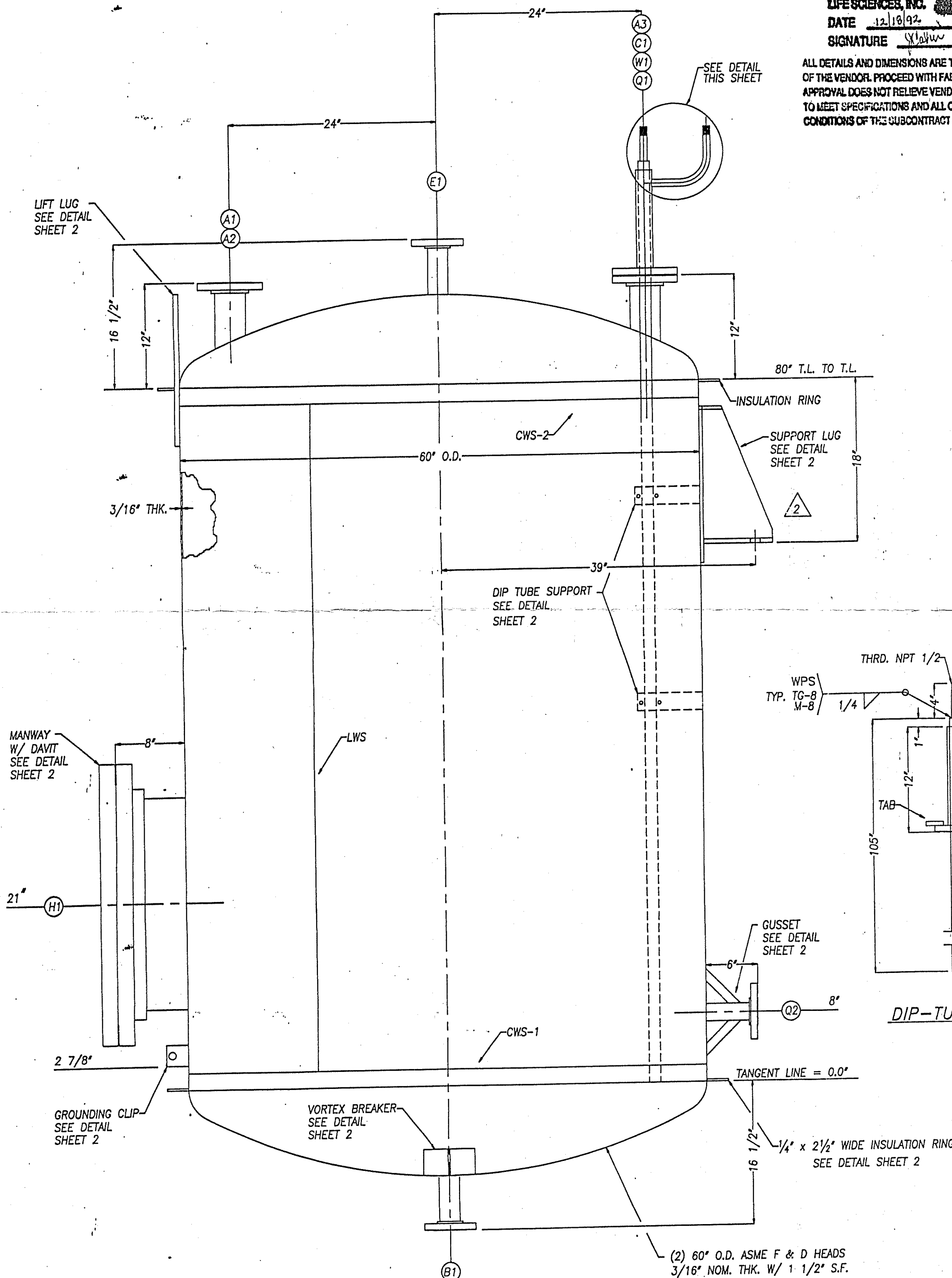
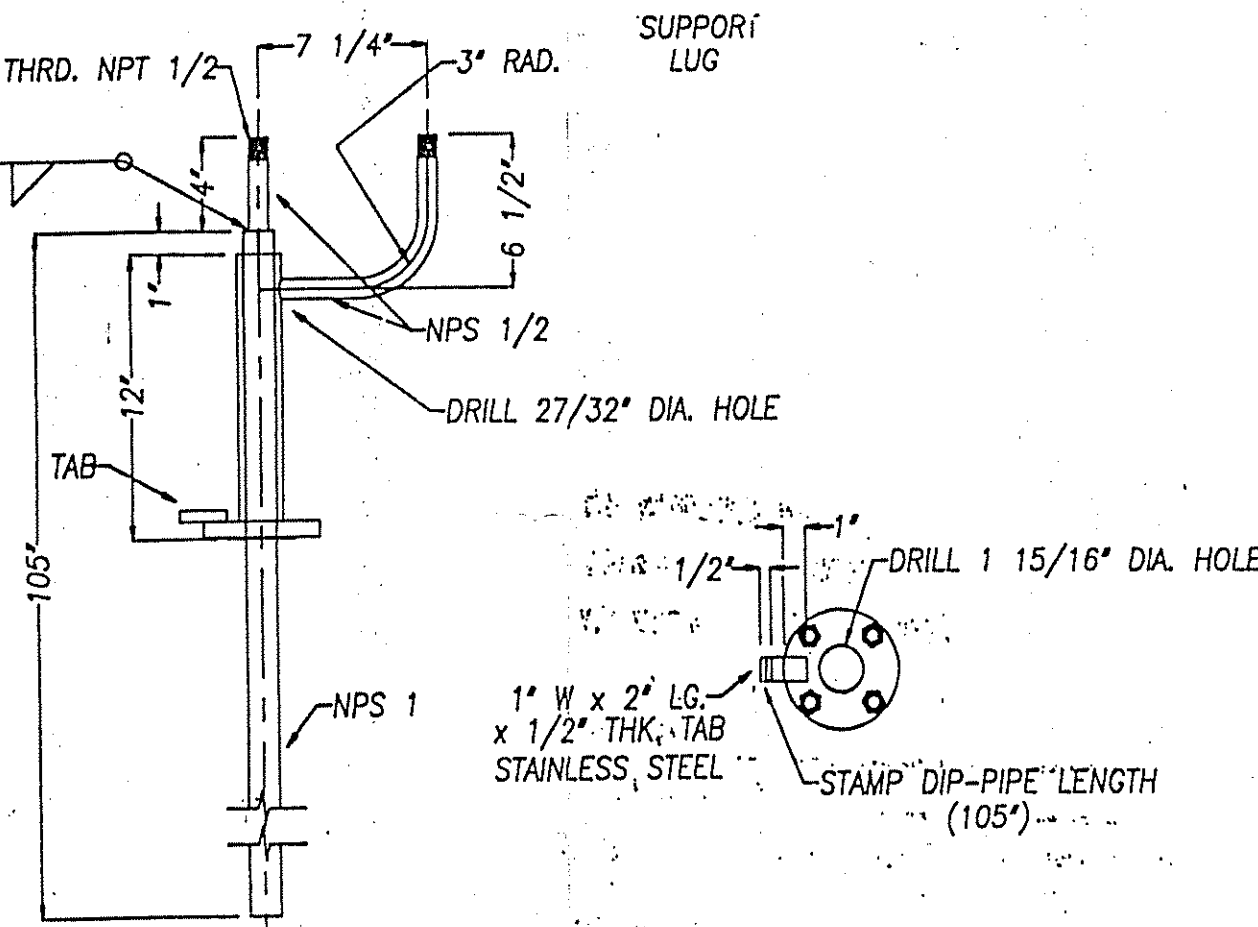
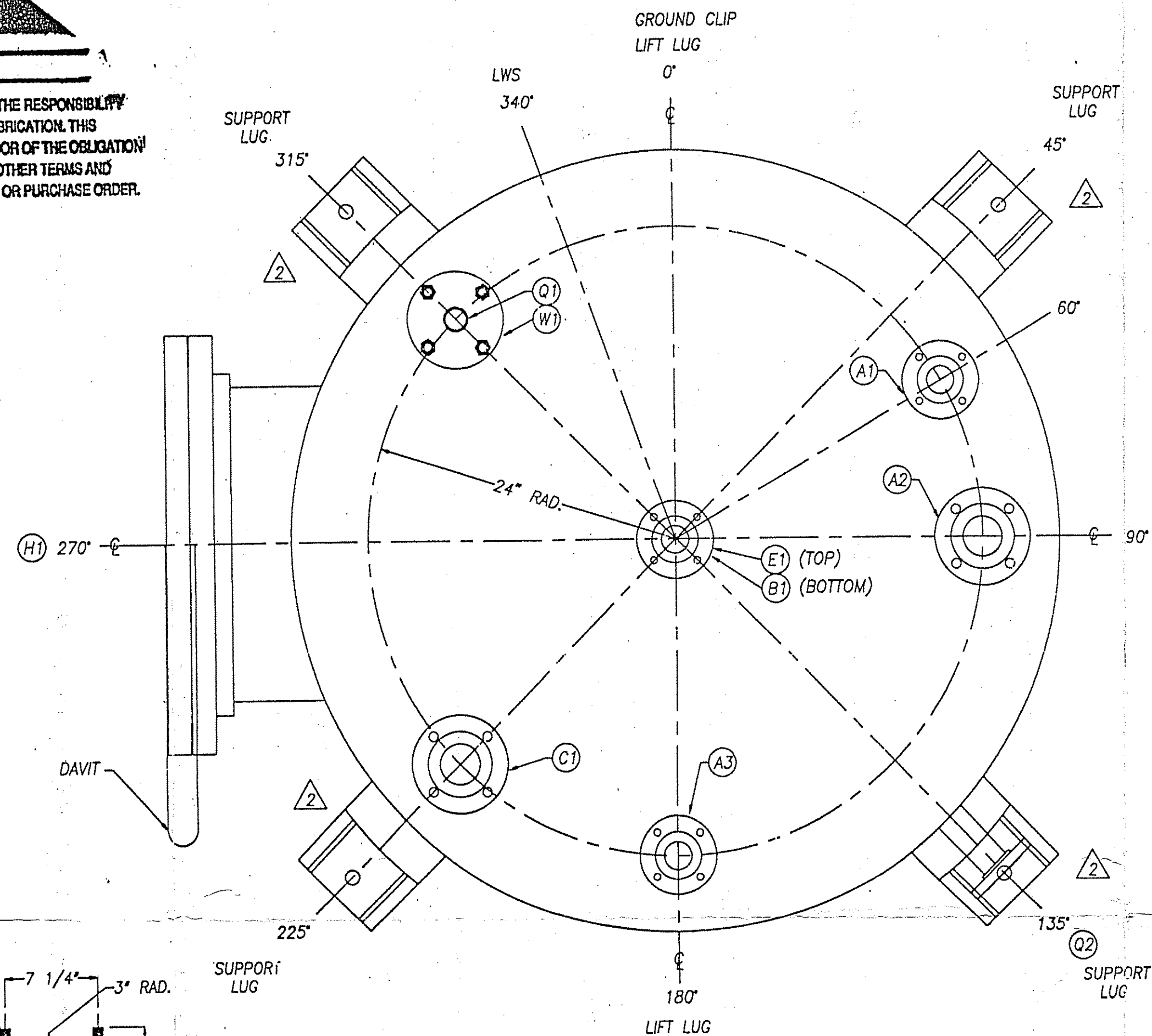
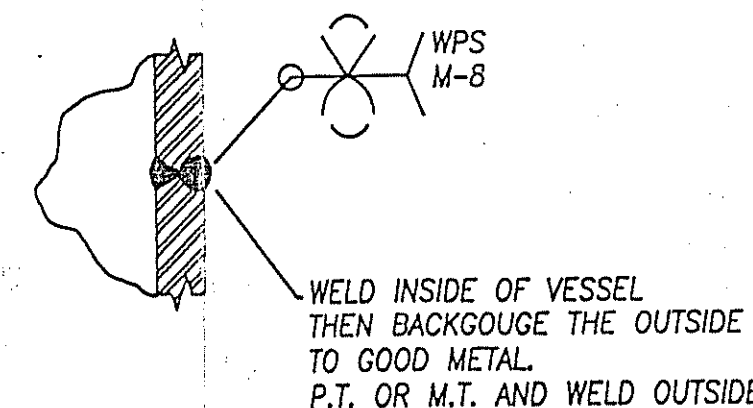




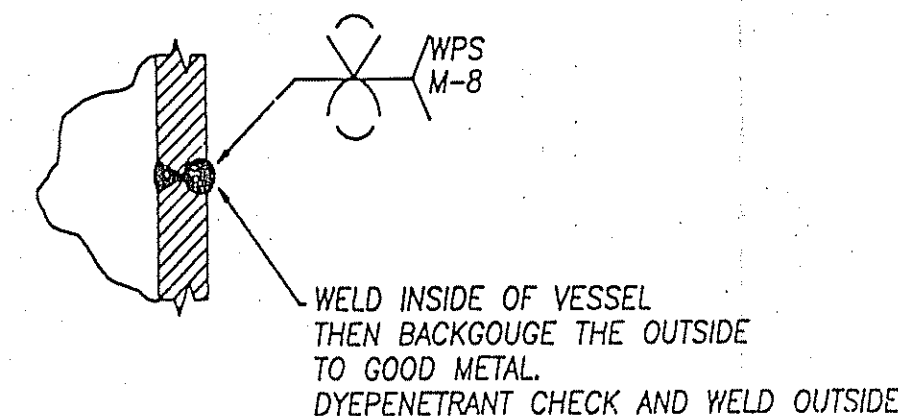
☒ APPROVED  
☐ APPROVED AS NOTED  
☐ RETURNED FOR CORRECTION  
**LIFE SCIENCES, INC.**  
 DATE 12/18/92  
 SIGNATURE *[Signature]*  
 ALL DETAILS AND DIMENSIONS ARE THE RESPONSIBILITY OF THE VENDOR. PROCEED WITH FABRICATION. THIS APPROVAL DOES NOT RELIEVE VENDOR OF THE OBLIGATION TO MEET SPECIFICATIONS AND ALL OTHER TERMS AND CONDITIONS OF THE SUBCONTRACT OR PURCHASE ORDER.



DIP-TUBE DETAIL



CIRC. WELD SEAM DETAIL



LONG. WELD SEAM DETAIL

NOTES:

- ALL NOZZLE BOLT HOLES TO STRADLE NATURAL CENTERLINES OF THE VESSEL.
- GRIND AND RADIUS ALL SHARP CORNERS PER ASME CODE.
- NO SPALLER OR ARC STRIKES ARE PERMITTED ON THE VESSEL. REMOVE BY GRINDING. LIQUID PENETRANT EXAMINATION OF THE GROUND AREA SHALL BE PERFORMED TO ASSURE CRACKS HAVE NOT RESULTED FROM THE ARC STRIKES.
- CLEAN AND DRAIN BEFORE SHIPMENT AND PROTECT ALL OPENINGS W/ COVERS.
- ALL LAP JOINT FLANGES HAVE GUSSETS.
- CERTIFIED MATERIAL TEST REPORTS (CMTR'S) SHALL BE PROVIDED FOR EACH MATERIAL USED ON THE VESSEL.

FINAL AS BUILT

NOZZLE SCHEDULE

| NO. | SIZE   | RATING | FACING | NECK     | REIN. PAD SIZE | COMMENTS       |
|-----|--------|--------|--------|----------|----------------|----------------|
| A1  | 2"     | 150#   | LJ     | SCH. 80S |                | PRODUCT INLET  |
| A2  | 3"     | 150#   | LJ     | SCH. 40S |                | INLET DRAIN    |
| A3  | 1 1/2" | 150#   | LJ     | SCH. 80S |                | PRODUCT INLET  |
| B1  | 2"     | 150#   | LJ     | SCH. 80S |                | PRODUCT OUTLET |
| C1  | 3"     | 150#   | LJ     | SCH. 40S |                | SPARE          |
| E1  | 2"     | 150#   | LJ     | SCH. 80S |                | VENT           |
| H1  | 24"    | EQ-35A | EQ-35A | 9/16\"   |                | MANWAY         |
| Q1  | 1 1/2" | 150#   | LJ     | SCH. 80S |                | LEVEL DIP-PIPE |
| Q2  | 1 1/2" | 150#   | LJ     | SCH. 80S |                | TEMPERATURE    |
| W1  | 3"     | 150#   | LJ     | SCH. 40S |                | SUPPORT FOR Q1 |

SISTERSVILLE TANK WORKS, INC  
SISTERSVILLE, W.V.

SHELL SIDE JACKET SIDE  
 10 PSI AT 203 °F \_\_\_\_\_ PSI AT \_\_\_\_\_ °F  
 MAX. ALLOWABLE WORKING PRESSURE MAX. ALLOWABLE WORKING PRESSURE  
 -1 °F AT 10 PSI \_\_\_\_\_ °F AT \_\_\_\_\_ PSI  
 MIN. DESIGN METAL TEMP. MIN. DESIGN METAL TEMP.

SER.NO. 92-238 YEAR BUILT 1992

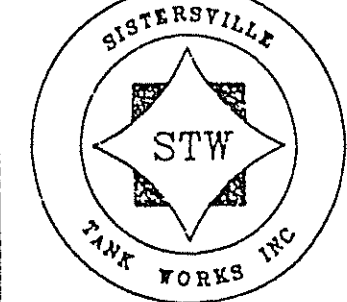
SISTERSVILLE TANK WORKS, INC.  
NAME PLATE DETAIL

| MATERIALS OF CONSTRUCTION |                                            |
|---------------------------|--------------------------------------------|
| VESSEL                    |                                            |
| SHELL                     | SA240-316L                                 |
| HEADS                     | SA240-316L                                 |
| FLANGES                   | SA105                                      |
| NOZZLE NECKS              | SA312-316L / SA240-316L                    |
| VESSEL SUPPORTS           | SA516-70                                   |
| EXT. BOLTS & NUTS         | SA192-B7 & SA194-2H                        |
| INT. BOLTS & NUTS         | 316 S.S.                                   |
| GASKETS                   | SPIRAL WOUND 316 SS W/PTFE FILLER / 1/16\" |
| DIRECT ATTACH.            | SA240-316L                                 |

| DESIGN CONDITIONS |                                                               |
|-------------------|---------------------------------------------------------------|
| DESIGN PRESS.     | 10 PSIG 5 oz/in <sup>2</sup> VAC                              |
| DESIGN TEMP.      | 203 °F -1 MIN. °F                                             |
| OPERATING PRESS.  | 4.2 @ 87M.P.S.I.G. VAC                                        |
| OPERATING TEMP.   | 176 °F 80 °C                                                  |
| CORR. ALLOW.      | 1/16"                                                         |
| CODE              | DESIGNED & FAB. PER ASME SECT. VIII, DIV. 1, 1989 ED., ADD.91 |
| CODE STAMP        | NOT REQUIRED                                                  |
| NAT'L BD. REG.    | NOT REQUIRED                                                  |
| STRESS RELIEF     | NOT REQUIRED                                                  |
| RADIOGRAPH        | NOT REQUIRED                                                  |
| JOINT EFF.        | 85%                                                           |
| HYDRO TEST        | 18 PSIG @ TOP                                                 |
| SPECIFIC GRAVITY  | 1.3                                                           |

| CAPACITIES AND WEIGHTS VP#490028-03415-10 |            |                       |             |
|-------------------------------------------|------------|-----------------------|-------------|
| OPERATING CAP.                            | 830 GAL.   |                       | CUB. FT.    |
| FULL CAPACITY                             | 1,150 GAL. | 141                   | CUB. FT.    |
| EMPTY WEIGHT                              | 2,018 LBS. | FULL H <sub>2</sub> O | 10,811 LBS. |
| OPERATING WT.                             |            | LBS./FULL PROD.       | 14,486 LBS. |

SURFACE PREPARATION BRUSH-OFF BLAST CLEANING PER SSPC-SP7  
 PAINTING (1) COAT OF EPOXY-PHENOLIC 6 MILS (MIN.) TO 7 MILS (MAX.)  
 MANUFACTURER: WISCONSIN PRIMER/FINISH: PLASITE 7122-H COLOR: GREEN



SISTERSVILLE TANK WORKS, INC.  
 ENGINEERING DEPARTMENT  
 1942 MCCOY STREET  
 SISTERSVILLE, W.VA. 26176

|                                           |               |                    |             |              |          |
|-------------------------------------------|---------------|--------------------|-------------|--------------|----------|
| CUSTOMER                                  | LIFE SCIENCES | PURCHASE ORDER NO. | 8549-490028 | DATE OF PUR. | 06-19-92 |
| ORGANIC PHASE RECEIVER<br>ITEM NO. D-3415 |               |                    |             |              |          |
| DRAWN BY                                  | DATE DRAWN    | SHEET              | 1 OF 2      | DWG. NO.     | 92-238   |
| M.P.S.                                    | 06-22-92      |                    |             |              |          |

SCALE

| REVISIONS |          |                          |        | REVISIONS |      |             |    | REVISIONS |      |             |    | REVISIONS |      |             |    |
|-----------|----------|--------------------------|--------|-----------|------|-------------|----|-----------|------|-------------|----|-----------|------|-------------|----|
| NO.       | DATE     | DESCRIPTION              | BY     | NO.       | DATE | DESCRIPTION | BY | NO.       | DATE | DESCRIPTION | BY | NO.       | DATE | DESCRIPTION | BY |
| 0         | 7-29-92  | RELEASED FOR FABRICATION | M.P.S. |           |      |             |    |           |      |             |    |           |      |             |    |
| 1         | 9-29-92  | REVISED PER CUSTOMER     | M.P.S. |           |      |             |    |           |      |             |    |           |      |             |    |
| 2         | 10/15/92 | REVISED PER CUSTOMER     | R.C.   |           |      |             |    |           |      |             |    |           |      |             |    |

PLOTTED: 10/16/91 13:58:4

PLOTTED: 10/16/91 13:58:47

### B. Dimensions and Description

- ### C. Designed Conditions of Service

#### D. Original Test

| DATE | HYDROSTATIC | AIR | HAMMER  |
|------|-------------|-----|---------|
|      | Top 18 PSI  | PSI | lb. PSI |
|      | PSI         | PSI | lb. PSI |

### E. Operating Conditions

[illegible]

## F. Summary of Revisions

### ~~5. Miscellaneous Operating Data~~

[illegible]

## H. Service and Repairs

| DATE     | BLDG. & LOCAT. | UNIT               | SERVICE                                        | REPORT NO. | SHOP ORDER NO. |
|----------|----------------|--------------------|------------------------------------------------|------------|----------------|
| 02-01-93 | 321            | B&R Rhodimet Whse. | Held as Item RHO-D-3415<br>Organic PH Receiver |            | 154400         |

[illegible]